

US Army Corps
of Engineers
Jacksonville District



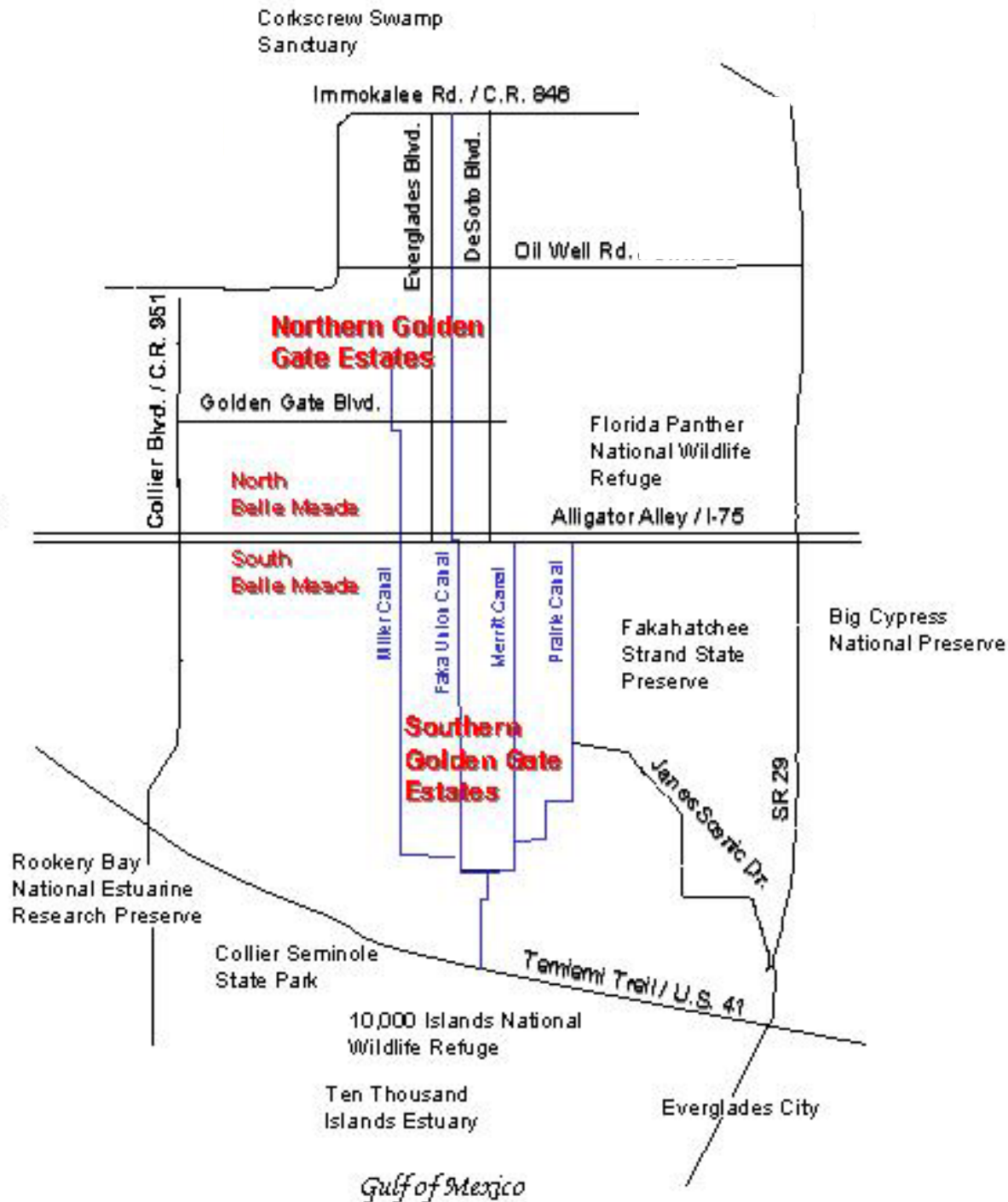
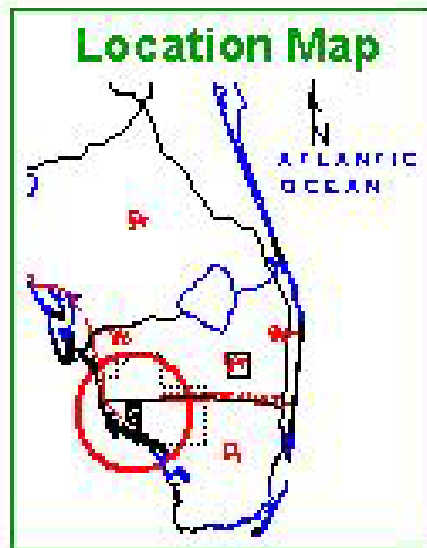
Picayune Strand Hydrologic Restoration

formerly referred to as "Southern Golden Gate Estates"

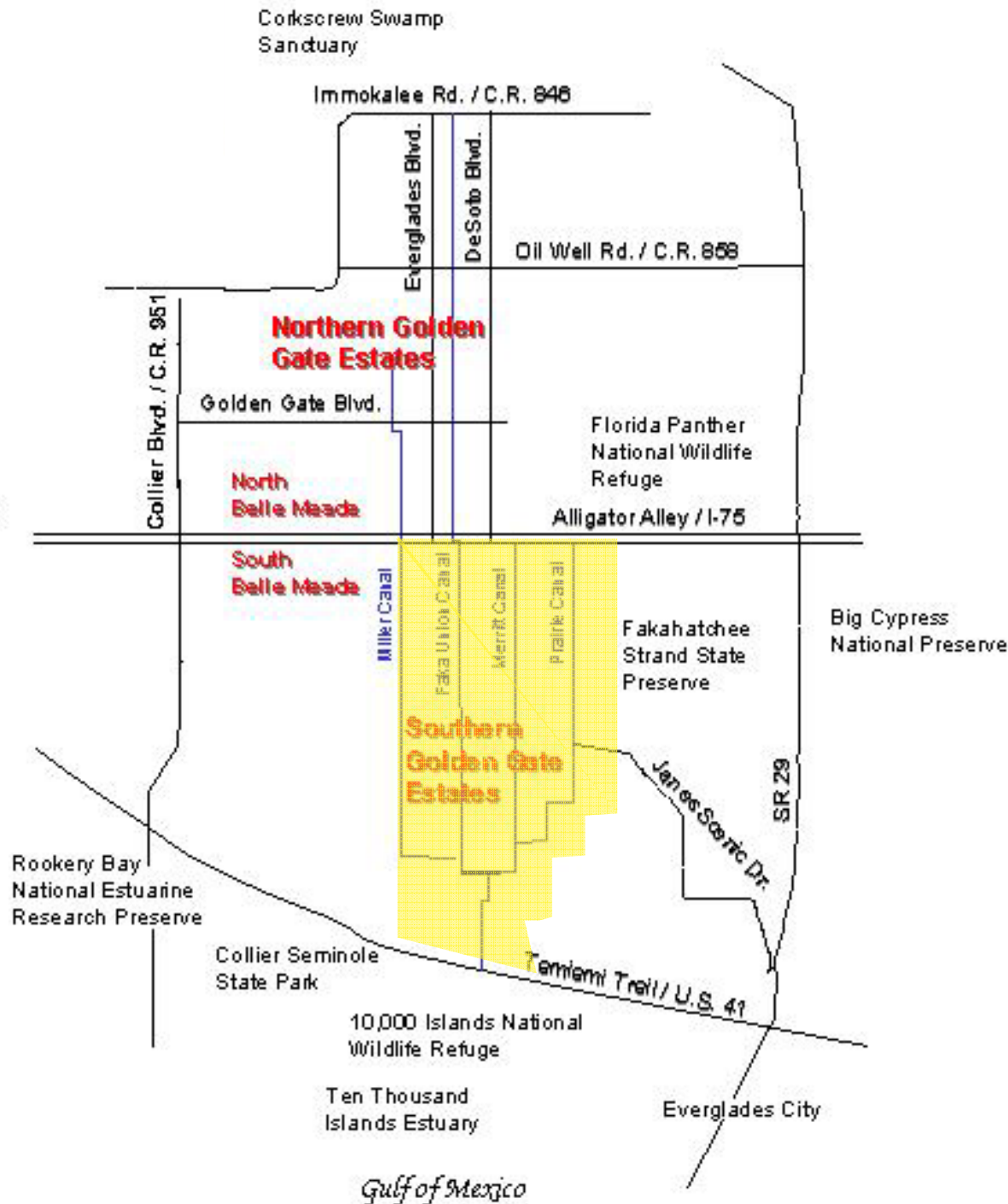
Authorization

A component of the Comprehensive Everglades Restoration Plan which requires congressional authorization for construction

Area Map



Hydrologic Restoration Study Area



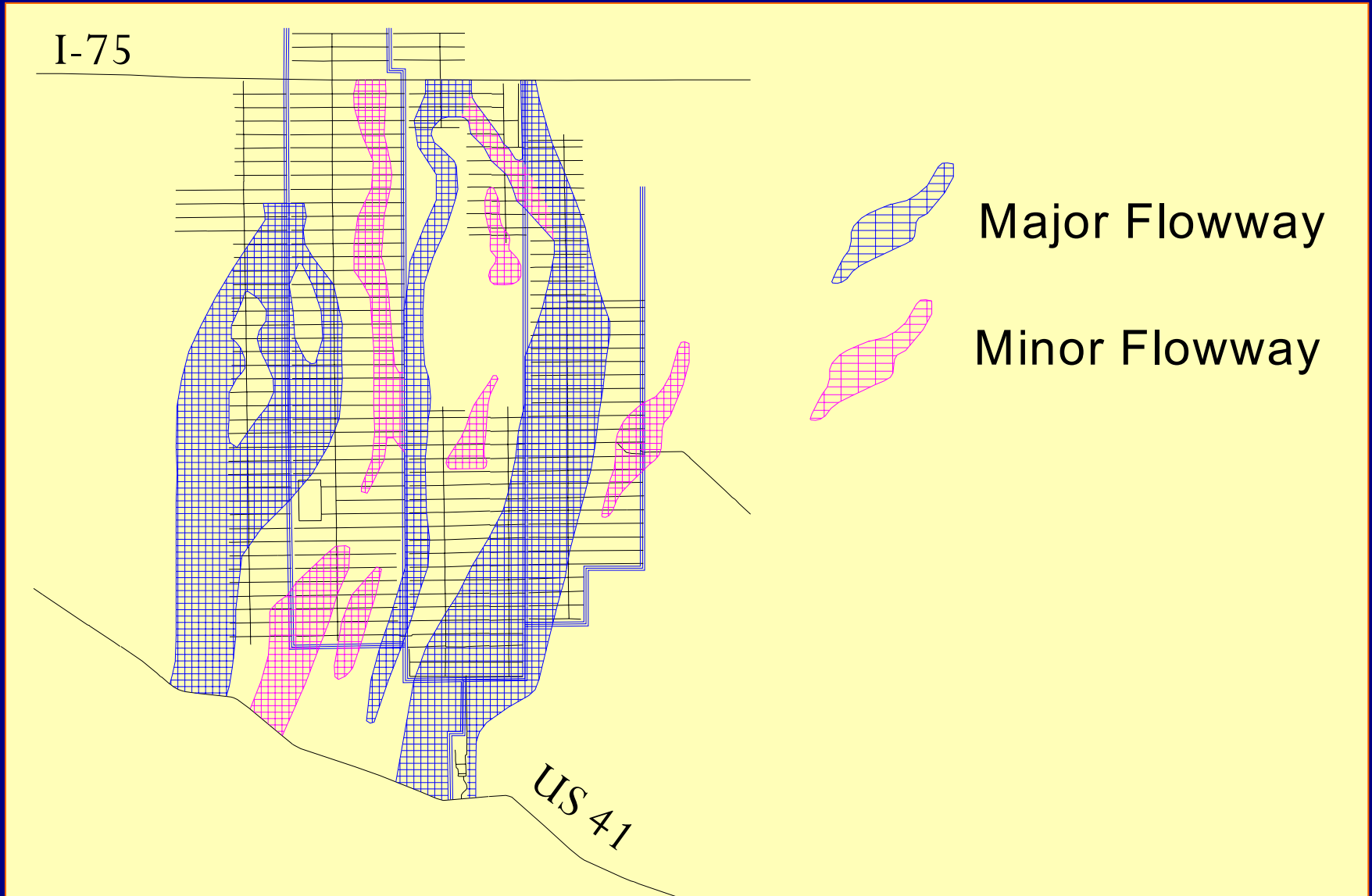
Project Background

- 279 miles of roads and 48 miles of canals constructed by private developer in late '60s
- Resulted in overdrainage of Southern Golden Gate Estates Area

Project Background

- Resulted in extreme flows to estuaries – affecting salinity and marine habitat
- Resulted in drier conditions inland
 - expansion of invasive plant species such as Brazilian pepper
 - loss of Cypress forests
 - as plant species changed, quality of animal habitat declined

Historic Flowways

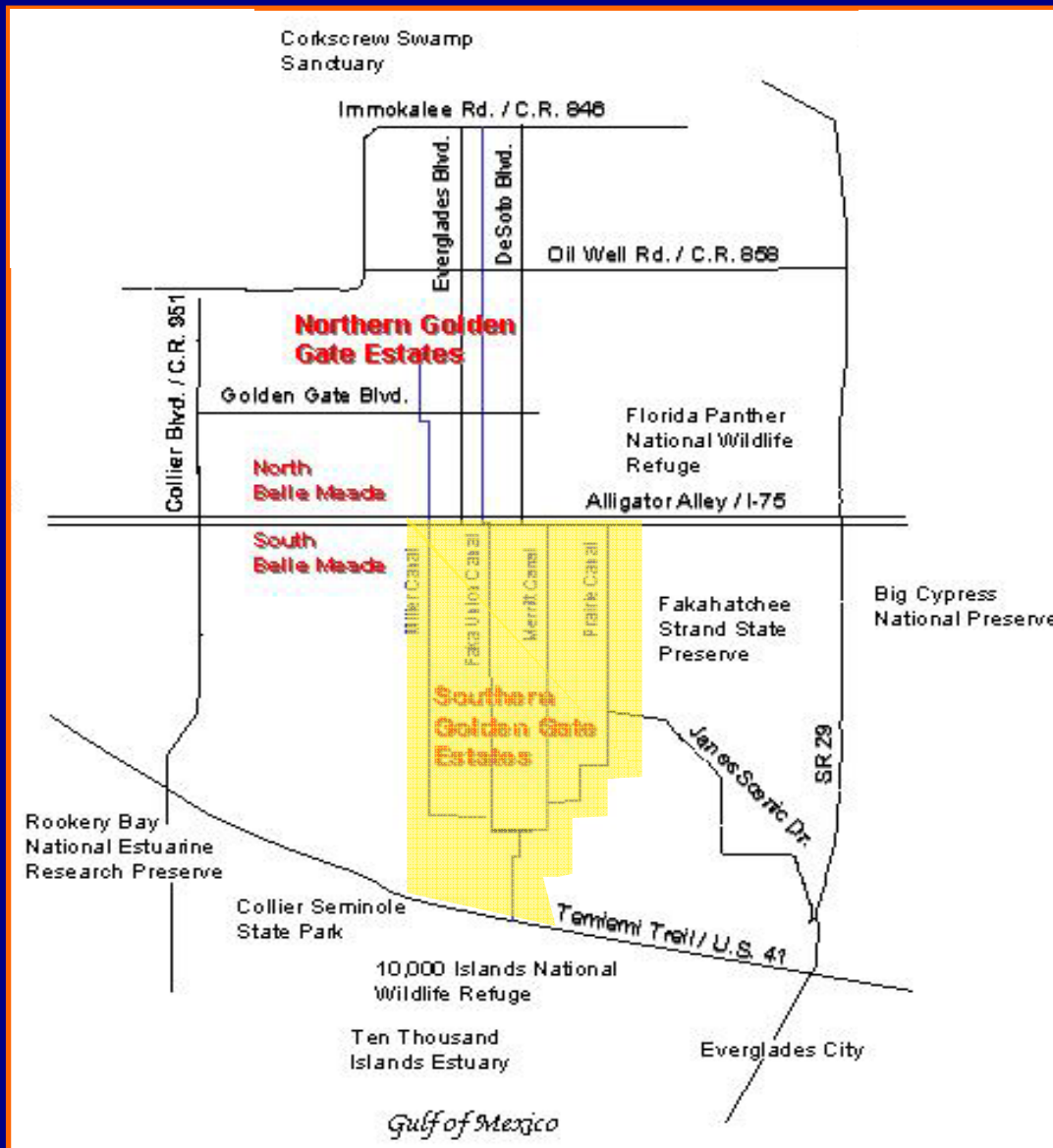


Alternatives Considered

- 20+ alternatives initially formulated
- Three alternatives warranted further evaluation
 - Alternative #6
 - Alternative #12
 - Alternative #3D
- “No Action” alternative also considered

Decision Criteria

1. Greater than 50% restoration to historic conditions
2. No increased flooding to Northern Golden Gate Estates
3. No point source discharge to the estuary



Alternative 6

Elements

No spreaders or
pump stations

46 canal plugs

227 miles of road
removed

Flood protection levees

Primary – all weather
roads

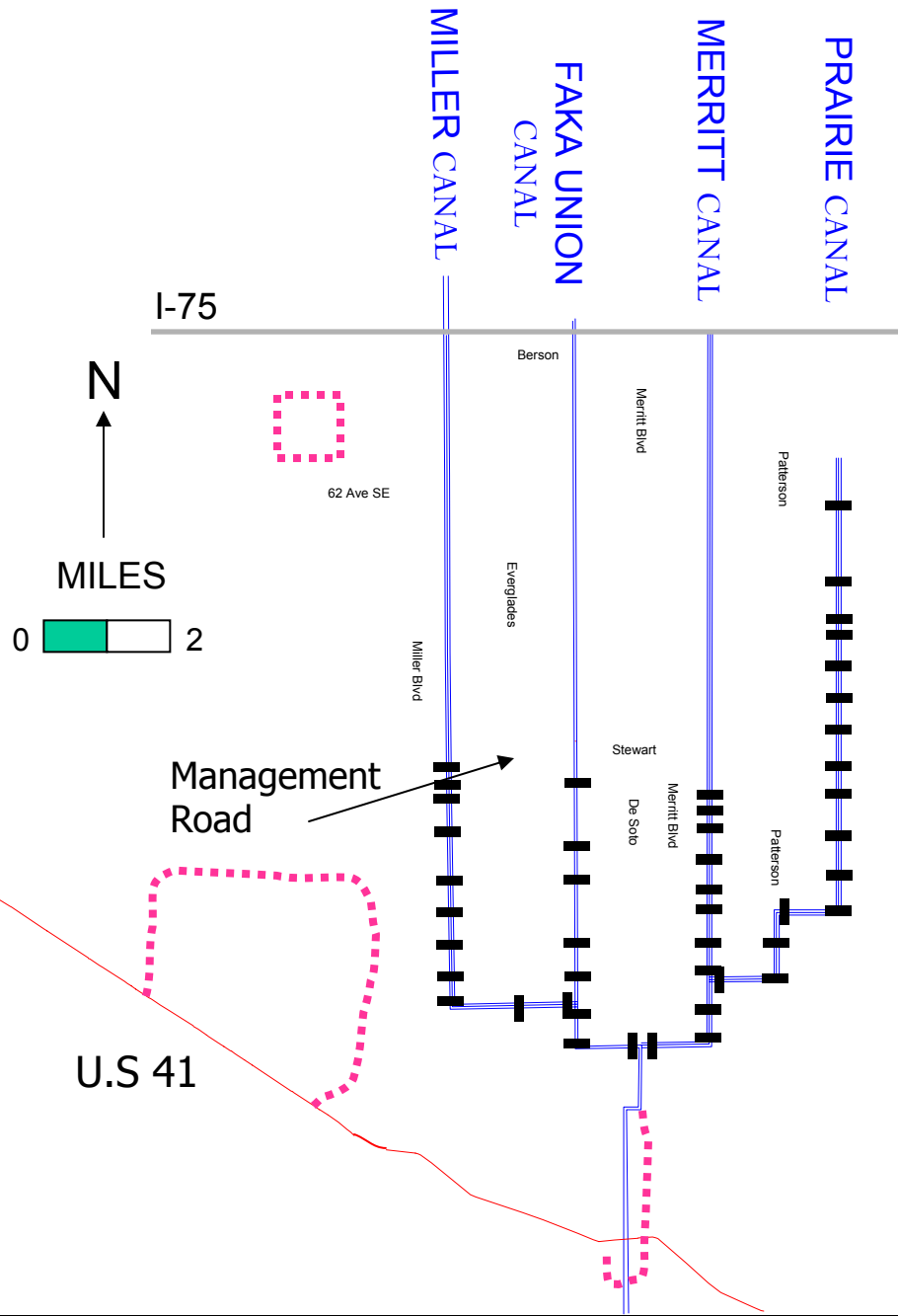
Secondary – dry season
at grade

Service – trails

\$738 million







**Fails to meet
Decision Criteria #2**

Picayune Strand



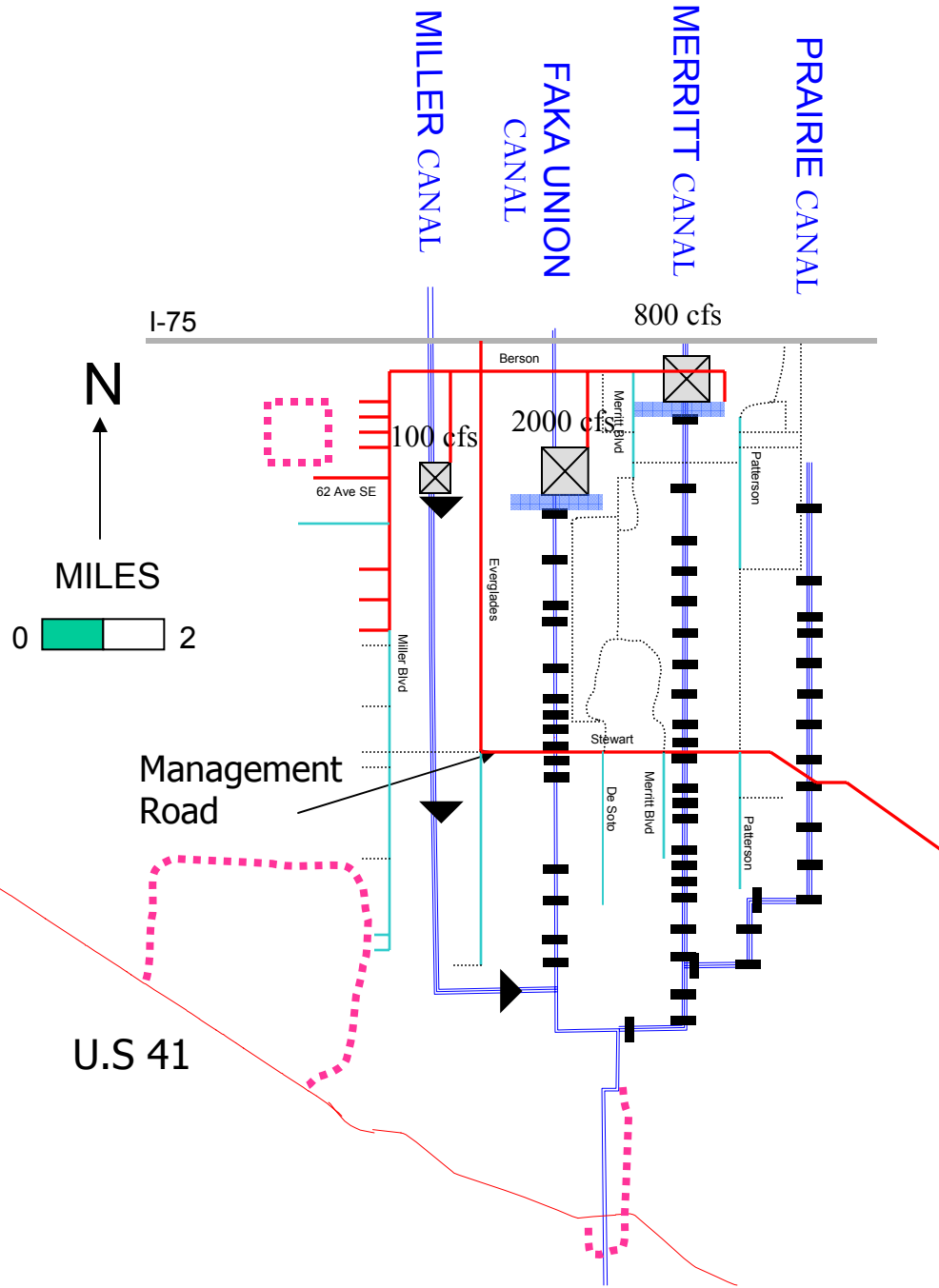
Alternative 12

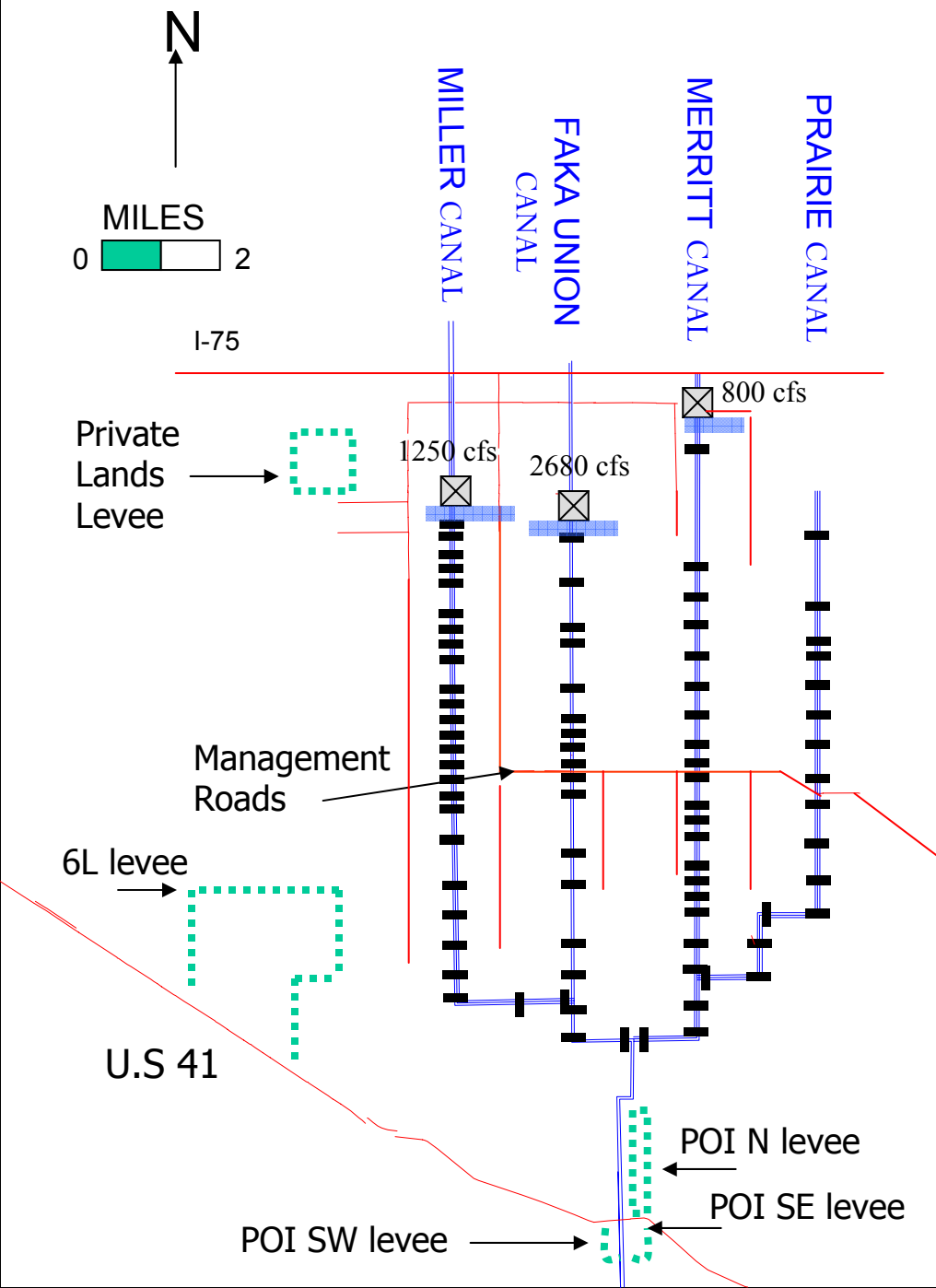
Elements

| | |
|---|------------------------------|
|  | 2 spreaders |
|  | 3 pump stations |
|  | 64 canal plugs |
|  | 3 Obermeyers in Miller Canal |
| | 227 miles of road removed |
| | Flood protection levees |
|  | Primary – all weather roads |
|  | \$351 million |

**Fails to meet Decision
Criteria #2 & #3**

Picayune Strand





Alternative 3D Recommended Plan Elements

| | |
|--|----------------------------------|
| | 3 Spreaders |
| | 3 Pump Stations |
| | 83 Canal Plugs |
| | 227 miles of Road Removed |
| | Primary All Weather Roads |
| | Flood Protection Levees |
| | \$349 million |

Meets All Decision Criteria

Picayune Strand

Alternative 3D

The Recommended Plan

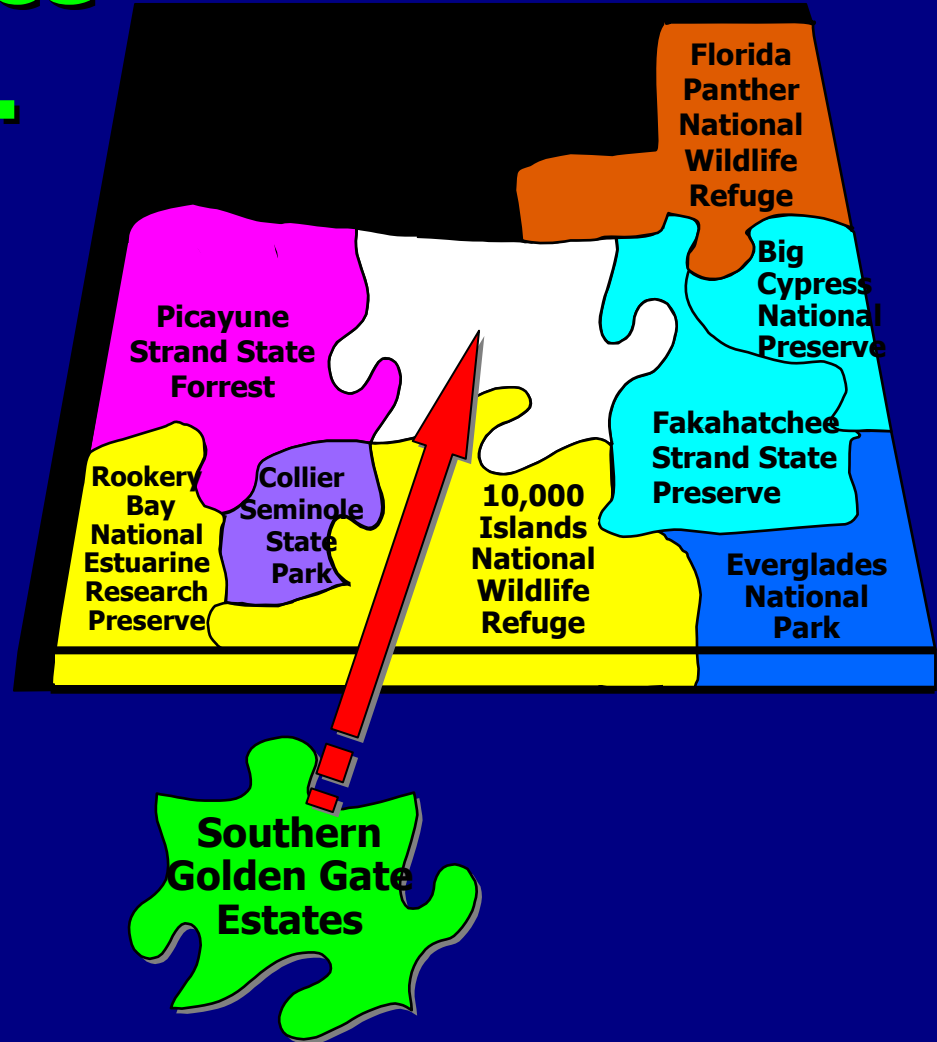
Summary of Project Benefits

Project will restore and enhance the following:

- freshwater flows to estuaries
- upland/wetland habitat in watershed
- pre-drainage watershed flow pattern to a sheet flow condition
- habitat for endangered/threatened species (panther, woodstork, etc.)
- increase groundwater levels

The “missing piece” of the puzzle...

restores
ecological
connectivity
between
publicly
owned lands



Estimated Costs

| | |
|---|----------------------|
| Construction Costs | \$124,946,000 |
| Preconstruction, Engineering, Design | \$11,369,000 |
| Construction Management | \$12,633,000 |
| Monitoring During Construction | \$7,431,000 |
| Land Acquisition | \$193,043,000 |
| Total Project Cost | \$349,422,000 |

Comparison: Restudy and PIR Plan

| | | |
|--------------------|--------------------------------|---------------------------------|
| Construction Costs | \$15,500,000 (October 1999) | \$124,946,000 (October 2004) |
|--------------------|--------------------------------|---------------------------------|

| | | |
|------------------|---|---------------|
| Land Acquisition | \$0 (main report) \$134,400,400 (appendix) | \$193,043,000 |
|------------------|---|---------------|

Acres **Same for both plans: the land between I-75, US 41, Fakahatchee Strand, and Belle Meade. Approximately 64,000 acres in the PIR.**

Comparison: Restudy and PIR Plan

| | | |
|---------------------------|-------------------|---|
| Roads removed | 130 miles | 227 miles |
| Canal plugs | 83 | 83 |
| Miller Station | 200 cfs | 1,250 cfs |
| Faka Union Station | 500 cfs | 2,630 cfs |
| Merritt Station | 160 cfs | 800 cfs |
| Flood protection | none | 5 levees |
| Siting criteria | conceptual | Land use, topo, connectivity |

Schedule

- Draft PIR distributed for public/agency review – May 14, 2004 thru July 13, 2004
- Transmit Final PIR to South Atlantic Division for Division Engineer's Notice - October 2004
- Second Public Comment Period - November 2004
- Chief of Engineer's Report - December 2004
- Congressional Authorization

Thank you



Questions?